IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please amend claims 3, 4, 8, 27, 72, 83 and 86.

Please cancel claims 22-24, 30-71 and 73-82 without prejudice

STATUS OF CLAIMS

Claim 1 **(previously presented)** An isolated nucleic acid molecule comprising a nucleotide sequence that encodes a polypeptide comprising an amino acid sequence that is at least 85% homologous to SEQ ID NO:2 or SEQ ID NO:3.

Claim 2 **(original)** The isolated nucleic acid molecule of claim 1 comprising a sequence that encodes a polypeptide comprising a sequence selected from the group consisting of SEQ ID NO:2 to SEQ ID NO:3.

Claim 3 **(currently amended)** The isolated nucleic acid molecule of claim 1 comprising a sequence at least 85% homologous to ~~a~~ the sequence of SEQ ID NO:1.

Claim 4 **(currently amended)** The isolated nucleic acid molecule of claim 1 comprising ~~a~~ the sequence of SEQ ID NO:1.

Claim 5 **(original)** The isolated nucleic acid molecule of claim 1 wherein said nucleic acid molecule is DNA.

Claim 6 **(original)** The isolated nucleic acid molecule of claim 1 wherein said nucleic acid molecule is RNA.

Claim 7 **(original)** An expression vector comprising a nucleic acid molecule of any one of claims 1 to 4.

Claim 8 **(currently amended)** The expression vector of claim 7 wherein said nucleic acid molecule comprises ~~a~~ the sequence of SEQ ID NO:1.

Claim 9 **(original)** The expression vector of claim 7 wherein said vector is a plasmid.

Claim 10 **(original)** The expression vector of claim 7 wherein said vector is a viral particle.

Claim 11 **(original)** The expression vector of claim 10 wherein said vector is selected from the group consisting of adenoviruses, baculoviruses, parvoviruses, herpesviruses, poxviruses, adeno-associated viruses, Semliki Forest viruses, vaccinia viruses, and retroviruses.

Claim 12 **(original)** The expression vector of claim 7 wherein said nucleic acid molecule is operably connected to a promoter selected from the group consisting of simian virus 40, mouse mammary tumor virus, long terminal repeat of human immunodeficiency virus, maloney virus, cytomegalovirus immediate early promoter, Epstein Barr virus, rous sarcoma virus, human actin, human myosin, human hemoglobin, human muscle creatine, and human metalothionein.

Claim 13 **(original)** A host cell transformed with an expression vector of claim 7.

Claim 14 **(original)** The transformed host cell of claim 13 wherein said cell is a bacterial cell.

Claim 15 **(original)** The transformed host cell of claim 14 wherein said bacterial cell is E. coli.

Claim 16 **(original)** The transformed host cell of claim 13 wherein said cell is yeast.

Claim 17 **(original)** The transformed host cell of claim 16 wherein said yeast is S. cerevisiae.

Claim 18 **(original)** The transformed host cell of claim 13 wherein said cell is an insect cell.

Claim 19 **(original)** The transformed host cell of claim 18 wherein said insect cell is S. frugiperda.

Claim 20 **(original)** The transformed host cell of claim 13 wherein said cell is a mammalian cell.

Claim 21 **(original)** The transformed host cell of claim 20 wherein mammalian cell is selected from the group consisting of chinese hamster ovary cells, HeLa cells, African green monkey kidney cells, human HEK-293 cells, and murine 3T3 fibroblasts.

Claims 22-24 **(canceled)**

Claim 25 **(previously presented)** A composition comprising a nucleic acid molecule of any one of claims 1 to 4 and an acceptable carrier or diluent.

Claim 26 **(original)** A composition comprising a recombinant expression vector of claim 7 and an acceptable carrier or diluent.

Claim 27 **(currently amended)** A method of producing a polypeptide that comprises a sequence <u>having at least 85% sequence homology to</u> ~~selected from the group of sequences consisting~~ SEQ ID NO:2 ~~to~~ <u>or</u> SEQ ID NO:3, ~~and homologs thereof, said~~

~~homologs at least 85% homologous to SEQ ID NO:2 or SEQ ID NO:3,~~ said method comprising the steps of:

a) introducing a recombinant expression vector of claim 8 into a compatible host cell;

b) growing said host cell under conditions for expression of said polypeptide; and

c) recovering said polypeptide.

Claim 28 **(original)** The method of claim 27 wherein said host cell is lysed and said polypeptide is recovered from the lysate of said host cell.

Claim 29 **(original)** The method of claim 27 wherein said polypeptide is recovered by purifying the culture medium without lysing said host cell.

Claims 30-71 **(canceled)**

Claim 72 **(currently amended)** A host cell that has been co-transfected with:

1) an isolated nucleic acid molecule comprising a nucleotide sequence wherein said isolated nucleic acid molecule hybridizes to the nucleotide sequence set forth in SEQ ID NO: 1 or the noncoding strand complementary thereto, under ~~stringent~~ the following hybridization conditions :

a) hybridization for 16 hours at 42°C in a hybridization solution comprising 50% formamide, 1% SDS, 1 M NaCl, 10% dextran sulfate and

(b) washing 2 times for 30 minutes at 60°C in a wash solution comprising 0.1x SSC and 1% SDS;

with the provision that the nucleic acid molecule comprises a nucleotide sequence that differs from the sequence set forth as SEQ ID NO: 1 or from its complementary strand by at least one nucleotide; and

2) a polynucleotide encoding a polypeptide comprising the amino acid sequence set forth in a sequence of SEQ ID NO:1 and that expresses a protein having the amino acid sequence set forth in SEQ ID NO:2 or SEQ ID NO:3.

Claims 73-82 **(canceled)**

Claim 83 **(currently amended)** The isolated nucleic acid of claim 1 comprising a sequence that is at least 90% homologous to ~~a~~ the sequence of SEQ ID NO:1.

Claim 84 **(previously presented)** The isolated nucleic acid of claim 1, wherein said encoded polypeptide is a seven transmembrane receptor.

Claim 85 **(previously presented)** The isolated nucleic acid of claim 84, wherein said seven transmembrane receptor is a G protein-coupled receptor.

Claim 86 **(currently amended)** An isolated nucleic acid molecule comprising a nucleotide sequence wherein said isolated nucleic acid molecule hybridizes to the nucleotide sequence set forth in SEQ ID NO: 1 or the noncoding strand complementary thereto, under ~~stringent~~ the following hybridization conditions :

a) hybridization for 16 hours at 42°C in a hybridization solution comprising 50% formamide, 1% SDS, 1 M NaCl, 10% dextran sulfate and

(b) washing 2 times for 30 minutes at 60°C in a wash solution comprising 0.1x SSC and 1% SDS;

with the provision that the nucleic acid molecule comprises a nucleotide sequence that differs from the sequence set forth as SEQ ID NO: 1 or from its complementary strand by at least one nucleotide.

Claim 87 **(previously presented)** The isolated nucleic acid molecule of claim 86, wherein said isolated nucleic acid molecule encodes a polypeptide that is a seven transmembrane receptor.

Claim 88 **(previously presented)** The isolated nucleic acid molecule of claim 87, wherein said seven transmembrane receptor is a G-protein coupled receptor.